



**Department of  
Environmental Protection  
Bureau of Land & Water Quality   Oct. 2000**

**O&M Newsletter**

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

**Free for the taking.**

BOD Incubator, as is. Converted General Electric refrigerator - large capacity. Believed to be in working condition. First come, first serve, and first to haul it away gets it. Stored at the Hartland POTW, property of the Irving Tanning Company. Please call 938-4491, ext. 323 for more information.

***Mickey Kuhns***

**For Practice**

1. The jar test is used to determine the proper dosage for which chemical?
  - a. chlorine for disinfection
  - b. activated carbon for absorption of organic chemicals
  - c. polymer for sludge coagulation.
  - d. lime for pH control.
2. Which of the following is most resistant to disinfection?
  - a. Fecal Coliform
  - b. Salmonella
  - c. Protozoa
  - d. Spores
3. An operator who normally wastes 1200 gallons of sludge with a concentration of 4% is now able to pump sludge with a 5% concentration. How many gallons

should be pumped to remove the same amount of sludge solids?

- a. 580 gallons
  - b. 820 gallons
  - c. 960 gallons
  - d. 1180 gallons
4. You notice a sour, septic odor coming from your secondary clarifiers and when you examine the return sludge, it is black. What would you do to fix this problem?
    - a. increase the return rate to reduce the sludge detention time in the clarifiers.
    - b. reduce the return rate to prevent septic sludge from harming the aeration basins.
    - c. increase the number of times the clarifiers are cleaned.
    - d. do nothing, this is a normal .

***Dick Darling***

**Mercury Progress Survey**

It's been a very busy year for both wastewater treatment plant operators and the Maine DEP dealing with the development of the mercury pollution prevention plans and establishing the interim mercury discharge limits. Lots of thought and effort have gone into these plans resulting in reductions in the amount of mercury discharged to

wastewater treatment systems and their receiving waters. In a continuing effort to comply with the mercury legislation passed in June of 1999, the Maine DEP will be surveying all of the facilities effected by the legislation to determine the progress they have made with their pollution prevention plans. This survey, which is the same one-page checklist used last year, will be mailed out in early November. Once all the surveys have been returned by early December, the results will be summarized by the DEP and reported to the Legislature in January.

In response to the work done on your pollution prevention plans, and your assistance in completing this survey, Maine DEP would like to thank all of you for your efforts to reduce the amount of mercury discharged to Maine's environment.

***Sterling Pierce***  
***Bureau of Land & Water Quality***

### **EPA 200 CSO Program National Excellence Awards.**

The department has been notified by U.S. EPA that The City of Saco took first place in the EPA 2000 Combined Sewer Overflow (CSO) Control Program National Excellence Awards. The award recognizes municipalities committed to protecting and improving the quality of the Nation's waters through outstanding implementation of the CSO Control Program.

The aim of the National Excellence Awards, created in 1991, is to heighten overall public awareness of wet weather flow control measures and to encourage public support of the programs that protect the operation of treatment facilities, the health and safety of

municipal employees and the public, and the quality of the Nation's receiving waters.

The department has worked with the City for a number years developing their CSO program and nominated them for the award. We are very pleased to know that the City's program is getting the national recognition it deserves.

With Saco's first place award, Maine has more award winning CSO communities than any other state. Previous award winners are: Bangor, 1996 first place; Bath, 1996 second place; and Augusta Sanitary District, 1997 first place.

The 2000 CSO Control Program National Excellence Awards will be presented to Saco October 12 at the national Water Environment Federation (WEF) conference to be held in Anaheim, California. For additional information please contact Ben Viola.

***Ben Viola***

### **UPCOMING TRAINING COURSES**

Oct. 3,10,17,24,31 & Nov. 7, 2000 in Scarborough, ME, Stormwater Instructional Module - approved for 6 hours, sponsored by JETCC (207) 767-2649.  
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October 4, 11, 18 & 25, 2000 in Bangor, ME, NPDES Laboratory Class - approved for 16 hours, sponsored by MRWA (207) 729-6569  
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October 4, 2000, in Old Orchard Beach, ME, Hazard Communication Standard

1910.1200 – approved for 3 hours,  
sponsored by Maine Rural Water  
Association (207) 729-6569

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October 11, 2000, in East Vassalboro,  
ME, Hazard Communication Standard  
1910.1200 – approved for 3 hours,  
sponsored by Maine Rural Water  
Association (207) 729-6569

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October 17, 2000 in Bangor, ME,  
Setting Up a Pump Maintenance  
Program - approved for 6 hours,  
sponsored by JETCC (207) 767-2649.

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October 17, 2000, in Old Orchard  
Beach, ME, Electric Motors: Design,  
Installation & Maintenance – approved  
for 4 hours, sponsored by Maine Rural  
Water Association (207) 729-6569

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October 23, 2000, in Brunswick, ME,  
Wastewater Operator Certification  
Review Grade I/II/III – approved for 6  
hours, sponsored by Maine Rural Water  
Association (207) 729-6569

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October 24, 2000, in Bangor, ME,  
Wastewater Operator Certification  
Review Grade I/II/III – approved for 6  
hours, sponsored by Maine Rural Water  
Association (207) 729-6569

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October 24, 2000 in Augusta, ME,  
Hands-on Review of BOD/TSS &  
Settleability - approved for 6 hours,  
sponsored by JETCC (207) 767-2649.

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October 25, 2000 in Brewer, ME, Belt  
Press Cleaning & Maintenance -  
approved for 6 hours, sponsored by  
JETCC (207) 767-2649.

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November 1, 2000 in Portland, ME,  
Electrical Maintenance & Controls -

approved for 6 hours, sponsored by  
JETCC (207) 767-2649.

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November 2, 2000 in Skowhegan, ME,  
Step by Step Basic Math Review -  
approved for 6 hours, sponsored by  
JETCC (207) 767-2649.

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November 2, 2000, in Brunswick, ME,  
Wastewater Operator Certification  
Review Grade IV/V – approved for 6  
hours, sponsored by Maine Rural Water  
Association (207) 729-6569

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November 3, 2000, in Bangor, ME,  
Wastewater Operator Certification  
Review Grade IV/V – approved for 6  
hours, sponsored by Maine Rural Water  
Association (207) 729-6569

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November 8, 2000 in Kittery, ME,  
SCADA Systems - approved for 6 hours,  
sponsored by JETCC (207) 767-2649.

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November 8, 2000, in East Vassalboro,  
Electric Motors: Design, Installation &  
Maintenance – approved for 4 hours,  
sponsored by Maine Rural Water  
Association (207) 729-6569

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Nov. 15, 16 & 17, 2000 in Westbrook,  
ME, WW Collection Systems w/  
Optional Exam - approved for 13 hours,  
sponsored by JETCC (207) 767-2649.

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November 28, 2000 in Augusta, ME,  
High Flow Management - approved for 6  
hours, sponsored by JETCC (207) 767-  
2649.

December 5, 2000 Ellsworth, ME,  
Polymer Sealant Repair & Preventive  
Maintenance Systems Applications in  
WWTF's & Pump Stations - approved  
for 6 hours, sponsored by JETCC (207)  
767-2649.

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December 7, 2000 Augusta, ME,  
Oxidation Reduction Potential (ORP) -  
approved for 6 hours, sponsored by  
JETCC (207) 767-2649.

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December 12, 2000            Scarborough  
Laboratory Quality Control & Quality  
Assurance - approved for 6 hours,  
sponsored by JETCC (207) 767-2649.

***Dick Darling***

**Answers to *For Practice*:**

1.     c   Jar tests are used to find the  
          best dose of polymer to use for  
          conditioning sludge.
2.     d   fecal coliform bacteria are  
          used as indicator organisms  
          because they are present in  
          human wastes and they are less  
          likely to be killed by  
          disinfectants than pathogenic  
          bacteria.
3.     c    $1200 \text{ Gallons} \times .04 = 4800$   
          ludge units/ $0.05 = 960$  gallons
4.     a.   you should increase the  
          return sludge rate to get the  
          sludge out of the clarifiers and  
          back to the aerobic aeration  
          tanks. Without active aeration,  
          the sludge will become anaerobic  
          or septic in the clarifiers if it  
          stays there too long. Septic  
          sludge in the clarifiers is a sure  
          sign that the sludge is spending  
          too much time there and that the  
          return rate should be increased.

# Mercury Containing Thermostats

## *Recycling Information*

In response to the problems of mercury contamination in Maine's environment, three thermostat manufacturers have banded together to form a company called the ***Thermostat Recycling Company (TRC)***. The purpose of this company is to handle the recycling of mercury containing thermostats. The way the *TRC* operates is for a \$15.00 deposit, a thermostat wholesaler can receive a plastic recycling bin to place at their place of business. Individuals and contractors may then place any mercury containing thermostats into the bin. Once the bin is full, the dealer simply seals the bin shut and mails it back to the *TRC* with the prepaid postage provided. In turn, the *TRC* will ship back an empty container. *TRC* recommends that each facility obtain two containers so that they will always have one on hand. If you have questions concerning how the program works, or what dealers are participating at this time, please contact the *TRC* at 703-841-3249 or 1-800-238-8192. More information, concerning the *TRC* and participating dealers, can be found on the Maine DEP internet site;

<http://janus.state.me.us/dep/rwm/hgthermo.htm>.

## Mercury Thermostat Recycling Participating Dealers

<u><i>Town</i></u>	<u><i>Company Name</i></u>	<u><i>Address</i></u>
Augusta	Redlon & Johnson	314 State Street Augusta, ME 04330
Bangor	Webber Supply Inc.	32 Thatcher Street Bangor, ME 04401
Bath	Redlon & Johnson	9 Redlon Road Bath, ME 04530
Caribou	FW Webb Co.	420 Main Street Caribou, ME 04736
Ellsworth	Chas. Foster Co., Inc.	55 Foster Street Ellsworth, ME 04605
Kennebunk	Roland's Plumbing Supply	119 York Street Kennebunk, ME 04042
South Portland	Webber Supply Inc.	17 Haskell Street South Portland, ME 04

List current as of October 3, 2000